

ABSTRACT OF THE DISCLOSURE

The object of the present invention is to form a chromium-oxide film, excellent in corrosion resistance, without containing an oxide film of other metal onto the metallic material. The chromium-oxide passivation film, excellent in corrosion resistance, without containing the oxide film of other metal can be formed inexpensively and in a short time, and a fluid supplying system for safely supplying fluid with hard corrosivity is able to be provided. One step of forming the passivation film consisting of a chromium oxide layer by giving heat treatment, in an oxidizing atmosphere, after coating chromium on the metallic material having a surface roughness (Ra) not more than $1.5\mu\text{m}$.